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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,570

06/03/2005

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SONYJP 3.3-1033

3574

530 7590 10/27/2009
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EXAMINER

PATEL, CHANDRAHAS B

ART UNIT

PAPER NUMBER

2464

MAIL DATE

DELIVERY MODE

10/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,570	Applicant(s) NABESAKO ET AL.	
	Examiner Chandrabhas Patel	Art Unit 2464	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-6, 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-6, 9, 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/2009 has been entered.

Claim Rejections - 35 USC § 103

2. Claims 1, 4-6, 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ro (US-PGPUB 2002/0150123) in view of Kim (USPN 5,859,846) and Terao et al. (USPN 7,187,844).

Regarding claim 1, Ro teaches an encoding/transmitting apparatus **[Fig. 2, 101]** comprising: input means for inputting data that includes audio data and video data **[Fig. 2, 106]**; encoding means for encoding the data input by the input means **[Fig. 2, 206, 212]**; storage means for storing encoded data generated by the encoding means **[Fig. 2, 215]**; multiplexing means for multiplexing the encoded data stored in the storage means and transmitting the multiplexed data to a predetermined receiving apparatus through a network **[Fig. 2, 214]**; in which the encoding means stops an encoding process when an area occupied by data in the storage means is larger than a predetermined value, and performs the encoding process when the area occupied by the data in the storage means is smaller than the predetermined value, in which, when

the multiplexing means stops multiplexing in response to the stop command, the encoding means continues the encoding process until the area occupied by data in the storage means is larger than a predetermined value **[Page 4, Paragraph 46-49, system stream is crated by combining different streams and different streams are combined in such way that the buffer overflow is prevented]**.

However, Ro does not teach audio-data output control means for fading-out or fading-in the audio data before the audio data is received by the encoding means; monitoring means for monitoring a state of the network, and for generating a stop command and supplying the stop command to the multiplexing means when the state of the network is undesirable, and the multiplexing means stops multiplexing in response to the stop command.

Terao teaches audio-data output control means for fading-out or fading- in the audio data before the audio data is received by the encoding means **[Col. 5, lines 40-44, fades out and fades in audio data before the data is output or input to memory]**. Kim teaches monitoring means for monitoring a state of the network, and for generating a stop command and supplying the stop command to the multiplexing means when the state of the network is undesirable, and the multiplexing means stops multiplexing in response to the stop command **[Col. 13, lines 23-46, stops multiplexing if the output buffer is full indicating that network is congested if the output buffer is full]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to fade-out and fade-in audio data so that audio level can be

gradually decreased and increased **[Col. 5, lines 44-47]** and stop multiplexing if the network is congested so that cell transmission can be dropped from input buffer to output buffer to prevent overflow **[Col. 13, lines 23-46]**.

Regarding claim 4, Ro teaches storing and controlling an amount in which the multiplexing means can transmit data **[Page 4, Paragraph 46]**.

Regarding claim 5, Ro teaches the data includes a plurality of program data items, the encoding means encodes the program data items, independently of each other, the storage means stores the encoded program data items, independently of each other, and the multiplexing means multiplexes the encoded program data items, generating one output data item **[Page 4, Paragraph 45-46]**.

Regarding claim 6, Ro teaches an encoding/transmitting method **[Fig. 2, 201]** comprising: a step of inputting data **[Fig. 2, 106]**; a step of encoding the data input in the step of inputting **[Fig. 2, 206, 212]**; a step of storing, in a storage unit, encoded data generated in the step of encoding the data **[Fig. 2, 215]**; and a step of multiplexing the encoded data stored in the storage unit by use of a multiplexing unit and transmitting the multiplexed data to a predetermined receiving apparatus through a network **[Fig. 2, 214, 220, Page 4, Paragraph 46-47]**; a step of monitoring a state of the network, in which the encoding means stops an encoding process when an area occupied by data in the storage means is larger than a predetermined value, and performs the encoding process when the area occupied by the data in the storage means is smaller than the predetermined value, and when the multiplexing means stops multiplexing in response to the stop command, the encoding means continues the encoding process until the

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area occupied by data in the storage means is larger than a predetermined value.

[Page 4, Paragraph 46-49, system stream is crated by combining different streams and different streams are combined in such way the buffer overflow is prevented].

However, Ro does not teach generating a stop command when the state of the network is undesirable, a step of fading-out and fading-in the audio data to be encoded is carried out, and the multiplexing means stops multiplexing in response to the stop command.

Kim teaches monitoring means for monitoring a state of the network, and for generating a stop command and supplying the stop command to the multiplexing means when the state of the network is undesirable, and the multiplexing means stops multiplexing in response to the stop command **[Col. 13, lines 23-46, stops multiplexing if the output buffer is full indicating that network is congested if the output buffer is full]**. Terao teaches a step of fading-out and fading-in the audio data to be encoded is carried out **[Col. 5, lines 40-44, fades out and fades in audio data before the data is output or input to memory]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to stop multiplexing if the network is congested so that cell transmission can be dropped from input buffer to output buffer to prevent overflow **[Col. 13, lines 23-46]** and to fade-out and fade-in audio data so that audio level can be gradually decreased and increased **[Col. 5, lines 44-47]**.

Regarding claim 9, Ro teaches the data includes a plurality of program data items, the program data items are encoded, independently of each other, in the step of encoding the data, the encoded program data items are stored in the storage unit, independently of each other, in the step of storing the encoded data, and the program data items are multiplexed in the step of multiplexing the encoded data, thereby generating one output data item **[Page 4, Paragraph 45-46]**.

Regarding claim 10, Ro teaches an encoding/transmitting apparatus **[Fig. 2, 101]** comprising: an encoding unit to encode received data that includes audio data and video data **[Fig. 2, 206, 212]**; a storage unit to store encoded data encoded by the encoding unit **[Fig. 2, 215]**; a multiplex unit to multiplex the encoded data received from the storage unit so as to produce multiplex data and transmit the multiplexed data to a predetermined receiving apparatus through a network **[Fig. 2, 214]**; in which the encoding unit stops an encoding process when an area occupied by data in the storage unit is larger than a predetermined value, and performs the encoding process when the area occupied by the data in the storage unit is smaller than the predetermined value, when the multiplex unit stops multiplexing in response to the stop command, the encoding unit continues the encoding process until the area occupied by data in the storage unit is larger than a predetermined value **[Page 4, Paragraph 46-49, system stream is crated by combining different streams and different streams are combined in such way that the buffer overflow is prevented]**.

However, Ro does not teach an audio-data output control unit for fade-out or fade-in the audio data before the audio data is received by the encoding unit; monitoring

means for monitoring a state of the network, a determining unit to monitor a state of the network, and generate a stop command and supply the stop command to the multiplex unit when the state of the network is undesirable, and the multiplex unit stops multiplexing in response to the stop command.

Terao teaches an audio-data output control unit for fade-out or fade-in the audio data before the audio data is received by the encoding unit **[Col. 5, lines 40-44, fades out and fades in audio data before the data is output or input to memory]**. Kim teaches a determining unit to monitor a state of the network, and generate a stop command and supply the stop command to the multiplex unit when the state of the network is undesirable, and the multiplex unit stops multiplexing in response to the stop command **[Col. 13, lines 23-46, stops multiplexing if the output buffer is full indicating that network is congested if the output buffer is full]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to fade-out and fade-in audio data so that audio level can be gradually decreased and increased **[Col. 5, lines 44-47]** and stop multiplexing if the network is congested so that cell transmission can be dropped from input buffer to output buffer to prevent overflow **[Col. 13, lines 23-46]**.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is (571)270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2464

/Chandrabhas Patel/
Examiner, Art Unit 2464